

# Diabetes in pregnancy

## NICE quality standard

### Draft for consultation

August 2015

## Introduction

This quality standard covers the management of diabetes and its complications in women (all females of childbearing potential) who are planning a pregnancy and women who are already pregnant. It will also cover areas in which additional or different care should be offered to women with diabetes and their newborn babies. For more information see the [diabetes in pregnancy topic overview](#).

### ***Why this quality standard is needed***

Approximately 700,000 women give birth in England and Wales each year, and up to 5% of these women have either pre-existing diabetes or gestational diabetes. Of women who have diabetes during pregnancy, it is estimated that approximately 87.5% have gestational diabetes (which may or may not resolve after pregnancy), 7.5% have type 1 diabetes and the remaining 5% have type 2 diabetes. The prevalence of all 3 types of diabetes is increasing. The incidence of gestational diabetes is also increasing as a result of higher rates of obesity in the general population and more pregnancies in older women.

Diabetes in pregnancy is associated with risks to the woman and to the developing fetus. Miscarriage, pre-eclampsia and preterm labour are more common in women with pre-existing diabetes. In addition, diabetic retinopathy can worsen rapidly during pregnancy. Stillbirth, congenital malformations, macrosomia, birth injury, perinatal mortality and postnatal adaptation problems (such as hypoglycaemia) are more common in babies born to women with pre-existing diabetes.

Diabetes in pregnant women is managed primarily within secondary care by joint diabetes and antenatal services. Most costs associated with treating diabetes in pregnancy are likely to be incurred in secondary care, in services commissioned by clinical commissioning groups (CCGs). Some aspects of care, specifically postnatal care, take place within primary care, and there are points along the pathway when community care services are also involved.

In women diagnosed with gestational diabetes, hyperglycaemia usually resolves after pregnancy, but a proportion of these women will have type 2 diabetes after the birth. Therefore, before a woman is discharged to the care of her GP, her blood glucose levels should be tested to ensure that they have returned to normal.

Women with pre-existing diabetes will be managed in general adult diabetes services after the birth.

The quality standard is expected to contribute to improvements in the following outcomes:

- perinatal mortality
- miscarriage rates
- fetal anomalies
- mode of birth
- prevention of type 2 diabetes
- incidence of gestational diabetes
- rates of preterm births
- retinopathy
- maternal diabetic complications

### ***How this quality standard supports delivery of outcome frameworks***

NICE quality standards are a concise set of prioritised statements designed to drive measurable improvements in the 3 dimensions of quality – patient safety, patient experience and clinical effectiveness – for a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which

it is based, should contribute to the improvements outlined in the following 2 outcomes frameworks published by the Department of Health:

- [NHS Outcomes Framework 2015–16](#)
- [Public Health Outcomes Framework 2013–2016](#).

Tables 1 and 2 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

**Table 1 [NHS Outcomes Framework 2015–16](#)**

<b>Domain</b>	<b>Overarching indicators and improvement areas</b>
1 Preventing people from dying prematurely	<p><b>Overarching indicators</b></p> <p>1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare</p> <p>i Adults ii Children and young people</p> <p>1c Neonatal mortality and stillbirths</p> <p><b>Improvement areas</b></p> <p><b>Reducing mortality in children</b></p> <p>1.6 i Infant mortality*</p> <p>ii Neonatal mortality and stillbirths</p>
2 Enhancing quality of life for people with long-term conditions	<p><b>Overarching indicator</b></p> <p>2 Health-related quality of life for people with long-term conditions**</p> <p><b>Improvement areas</b></p> <p><b>Ensuring people feel supported to manage their condition</b></p> <p>2.1 Proportion of people feeling supported to manage their condition</p> <p><b>Reducing time spent in hospital by people with long-term conditions</b></p> <p>2.3 ii Unplanned hospitalisation for asthma, diabetes and epilepsy in under 19s</p>
4 Ensuring that people have a positive experience of care	<p><b>Overarching indicators</b></p> <p>4a Patient experience of primary care</p> <p>i GP services</p> <p>ii GP Out-of-hours services</p> <p>4b Patient experience of hospital care</p> <p>4c <i>Friends and family test</i></p> <p>4d <i>Patient experience characterised as poor or worse</i></p> <p><i>I Primary care</i></p> <p><i>ii Hospital care</i></p> <p><b>Improvement areas</b></p> <p><b>Improving people's experience of outpatient care</b></p>

	<p>4.1 Patient experience of outpatient services  <b>Improving access to primary care services</b></p> <p>4.4 Access to i GP services  <b>Improving women and their families' experience of maternity services</b></p> <p>4.5 Women's experience of maternity services</p>
5 Treating and caring for people in a safe environment and protecting them from avoidable harm	<p><b>Improving the safety of maternity services</b></p> <p>5.5 Admission of full-term babies to neonatal care  <b>Improving the culture of safety reporting</b></p> <p>5.6 Patient safety incidents reported</p>
<p><b>Alignment with Public Health Outcomes Framework</b></p> <p>* Indicator is shared</p> <p>** Indicator is complementary</p>	

**Table 2 [Public health outcomes framework for England, 2013–2016](#)**

Domain	Objectives and indicators
2 Health improvement	<p><b>Objective</b></p> <p>People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities</p> <p><b>Indicators</b></p> <p>2.1 Low birth weight of term babies</p> <p>2.2 Breastfeeding</p> <p>2.3 Smoking status at time of delivery</p> <p>2.11 Diet</p> <p>2.12 Excess weight in adults</p> <p>2.17 Recorded diabetes</p>
4 Healthcare public health and preventing premature mortality	<p><b>Objective</b></p> <p>Reduced numbers of people living with preventable ill health and people dying prematurely, whilst reducing the gap between communities</p> <p><b>Indicators</b></p> <p>4.1 Infant mortality*</p>
<p><b>Alignment with NHS Outcomes Framework</b></p> <p>* Indicator is shared</p>	

### ***Patient experience and safety issues***

Ensuring that care is safe and that people have a positive experience of care is vital in a high-quality service. It is important to consider these factors when planning and delivering services relevant to diabetes in pregnancy.

NICE has developed guidance and an associated quality standard on patient experience in adult NHS services (see the NICE pathway on [patient experience in](#)

[adult NHS services](#)), which should be considered alongside this quality standard. They specify that people receiving care should be treated with dignity, have opportunities to discuss their preferences, and be supported to understand their options and make fully informed decisions. They also cover the provision of information to patients and service users. Quality statements on these aspects of patient experience are not usually included in topic-specific quality standards. However, recommendations in the development sources for quality standards that affect patient experience and are specific to the topic are considered during quality statement development.

### ***Coordinated services***

The quality standard for diabetes in pregnancy specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole diabetes in pregnancy care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to pregnant women with diabetes and their newborn babies.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing a high-quality diabetes in pregnancy service are listed in Related quality standards. [\[Link to section in web version\]](#)

### **Training and competencies**

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare professionals involved in assessing, caring for and treating pregnant women with diabetes and their newborn babies should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard. Quality statements on staff training and competency are not usually included in quality standards. However, recommendations in the development source(s) on specific types of training for the

topic that exceed standard professional training are considered during quality statement development.

### **Role of families and carers**

Quality standards recognise the important role families and carers have in supporting pregnant women with diabetes. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.

## **List of quality statements**

[Statement 1](#). Women with diabetes planning a pregnancy are prescribed 5mg/day folic acid until 12 weeks gestation.

[Statement 2](#). Pregnant women with diabetes are supported to self-monitor their blood glucose levels during pregnancy.

[Statement 3](#). Women with pre-existing diabetes are seen at the joint diabetes and antenatal care clinic within 1 week of their pregnancy being confirmed.

[Statement 4](#). Pregnant women with pre-existing diabetes have their HbA1c levels measured at their booking appointment.

[Statement 5](#). Pregnant women with pre-existing diabetes are referred for retinal assessment at their booking appointment.

[Statement 6](#). Pregnant women diagnosed with gestational diabetes are reviewed at the joint diabetes and antenatal care clinic within 1 week of diagnosis.

[Statement 7](#). Women who have had gestational diabetes have annual HbA1c testing.

## **Questions for consultation**

### ***Questions about the quality standard***

**Question 1** Does this draft quality standard accurately reflect the key areas for quality improvement?

**Question 2** If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures?

**Question 3** Do you have an example from practice of implementing the NICE guideline(s) that underpins this quality standard? If so, please submit your example to the NICE local practice collection [here](#). **Examples of using NICE quality standards can also be submitted.**

***Questions about the individual quality statements***

**Question 4** For draft quality statements 3 and 6: Are services for pregnant women with diabetes provided by a joint diabetes and antenatal clinic, if not how are services provided?

## Quality statement 1: High-dose folic acid

### ***Quality statement***

Women with diabetes planning a pregnancy are prescribed 5 mg/day folic acid until 12 weeks of gestation.

### ***Rationale***

High-dose folic acid supplements should be prescribed for women with diabetes from at least 3 months before conception until 12 weeks of gestation, because they are at greater risk of having a baby with a neural tube defect. The benefits of high-dose folic acid supplementation should be discussed with the woman during preconception counselling as part of her preparation for pregnancy. If a woman with diabetes has an unplanned pregnancy, she should be prescribed high-dose folic acid as soon as the pregnancy is confirmed.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements and written clinical protocols to ensure that women with diabetes planning a pregnancy are prescribed 5 mg/day folic acid from at least 3 months before conception until 12 weeks gestation.

**Data source:** [National Pregnancy in Diabetes Audit](#) and local data collection.

#### **Process**

a) Proportion of pregnant women with type 1 diabetes who were prescribed 5 mg/day folic acid until 12 weeks gestation.

Numerator – the number in the denominator who are prescribed 5 mg/day folic acid until 12 weeks gestation.

Denominator – the number of pregnant women with type 1 diabetes.

**Data source:** [National Pregnancy in Diabetes Audit](#) and local data collection.

b) Proportion of pregnant women with type 2 diabetes who were prescribed 5 mg/day folic acid until 12 weeks gestation.

Numerator – the number in the denominator who are prescribed 5 mg/day folic acid until 12 weeks gestation.

Denominator – the number of pregnant women with type 2 diabetes.

**Data source:** [National Pregnancy in Diabetes Audit](#) and local data collection.

### **Outcome**

Congenital anomaly rate.

**Data source:** [National Pregnancy in Diabetes Audit](#) and local data collection.

### ***What the quality statement means for service providers, healthcare professionals and commissioners***

**Service providers** (in primary and secondary care) ensure that they have systems and processes in place so that women with diabetes who are planning a pregnancy are prescribed high-dose 5 mg/day folic acid from at least 3 months before conception until 12 weeks of gestation.

**Healthcare professionals** (GPs, community midwives and healthcare professionals in joint diabetes and antenatal care teams) ensure that they prescribe high-dose 5 mg/day folic acid to women with diabetes who are planning a pregnancy, from at least 3 months before conception until 12 weeks of gestation. Healthcare professionals also ensure that they advise women with diabetes who are planning a pregnancy about the benefits of taking high-dose folic acid as part of preconception counselling.

**Commissioners** (NHS England and clinical commissioning groups) ensure that they commission pre-pregnancy services in which high-dose 5 mg/day folic acid is prescribed to women with diabetes who are planning a pregnancy, from at least 3 months before conception until 12 weeks of gestation.

***What the quality statement means for patients***

**Women with diabetes** who are planning a pregnancy are given a prescription for high-dose folic acid (one 5 mg tablet a day) for at least 3 months before they get pregnant and for the first 12 weeks of pregnancy. This helps to lower the chances of the baby having a condition called a neural tube defect (for example, spina bifida).

***Source guidance***

- [Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period](#) (2015) NICE guideline NG3, recommendation 1.1.11

## Quality statement 2: Self-monitoring of blood glucose levels during pregnancy

### ***Quality statement***

Pregnant women with diabetes are supported to self-monitor their blood glucose levels during pregnancy.

### ***Rationale***

Women with diabetes need to be able to self-monitor their blood glucose levels at an increased frequency during pregnancy. This will help them to maintain good blood glucose control throughout pregnancy, which in turn will reduce the risk of adverse outcomes such as fetal macrosomia, trauma during birth, induction of labour and/or caesarean section, neonatal hypoglycaemia and perinatal death. Support should be provided to ensure that women have access to blood glucose monitors and enough testing strips, and know how to use them.

### ***Quality measures***

#### **Structure**

a) Evidence of local arrangements and written clinical protocols to ensure that pregnant women with diabetes are supported to self-monitor their blood glucose levels during pregnancy.

***Data source:*** Local data collection.

b) Evidence of local arrangements and written clinical protocols to ensure that pregnant women with diabetes have access to blood glucose monitoring devices and enough testing strips.

***Data source:*** Local data collection.

#### **Process**

a) Proportion of pregnant women with diabetes who are supported to self-monitor their blood glucose levels during pregnancy.

Numerator – the number in the denominator who feel supported to self-monitor their blood glucose levels during pregnancy.

Denominator – the number of pregnant women with diabetes.

**Data source:** Local data collection

b) Proportion of pregnant women with diabetes who have a blood glucose monitor.

Numerator – the number in the denominator who have a blood glucose monitor.

Denominator – the number of pregnant women with diabetes.

**Data source:** Local data collection.

c) Proportion of pregnant women with diabetes who have enough blood glucose testing strips.

Numerator – the number in the denominator who have enough blood glucose testing strips.

Denominator – the number of pregnant women with diabetes.

**Data source:** Local data collection.

### **Outcome**

a) Women's desire to self-monitor their blood glucose.

**Data source:** Local data collection.

b) Adverse fetal outcomes.

**Data source:** Local data collection.

### ***What the quality statement means for service providers, healthcare professionals and commissioners***

**Service providers** (in primary and secondary care) ensure that they provide pregnant women with diabetes with blood glucose monitors and enough testing strips, and so support the women to self-monitor their blood glucose levels.

**Healthcare professionals** (GPs, community midwives and healthcare professionals in joint diabetes and antenatal care teams) ensure that they support pregnant women with diabetes to self-monitor their blood glucose levels during pregnancy, including checking that the woman has a blood glucose monitor and enough testing strips.

**Commissioners** (NHS England and clinical commissioning groups) ensure that they commission services that provide pregnant women with diabetes with blood glucose monitors and enough testing strips so that they can self-monitor their blood glucose levels.

### ***What the quality statement means for patients***

**Pregnant women with diabetes** are supported to self-monitor their blood glucose levels during their pregnancy. They are given a blood glucose monitor and enough testing strips for their needs.

### ***Source guidance***

- [Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period](#) (2015) NICE guideline NG3, recommendations 1.1.13, 1.2.12, 1.3.1–1.3.3

### ***Equality and diversity considerations***

When advising women to start or increase the frequency of blood glucose monitoring, take into account that some women may experience anxiety and feel pressure to adjust and overly regulate their blood glucose levels.

## Quality statement 3: First contact with joint diabetes and antenatal clinic

### ***Quality statement***

Women with pre-existing diabetes are seen by the joint diabetes and antenatal clinic within 1 week of their pregnancy being confirmed.

### ***Rationale***

Women with diabetes who become pregnant need additional care in addition to routine antenatal care. A joint diabetes and antenatal clinic is able to ensure that specialist care is delivered in order to minimise adverse pregnancy outcomes. Immediate access to a joint diabetes and antenatal clinic within 1 week will help to ensure that a woman's diabetes is controlled during early pregnancy, when there is an increased risk of fetal loss and anomalies. It will also help to ensure that the woman's care is planned appropriately throughout her pregnancy.

### ***Quality measures***

#### **Structure**

a) Evidence of local arrangements to provide a joint diabetes and antenatal clinic.

**Data source:** Local data collection.

b) Evidence of local arrangements and written clinical protocols to ensure that women with pre-existing diabetes are seen at the joint diabetes and antenatal clinic within 1 week of becoming pregnant.

**Data source:** Local data collection.

#### **Process**

Proportion of women with pre-existing diabetes who are seen at the joint diabetes and antenatal clinic within 1 week of their pregnancy being confirmed .

Numerator – the number in the denominator who are seen at the joint diabetes and antenatal clinic within 1 week of their pregnancy being confirmed.

Denominator – the number of pregnant women with pre-existing diabetes.

**Data source:** [National Pregnancy in Diabetes Audit](#).

### **Outcome**

a) Maternal satisfaction.

**Data source:** *Local data collection.*

b) Perinatal morbidity.

**Data source:** *Local data collection.*

c) Perinatal mortality.

**Data source:** *Local data collection.*

d) Maternal adverse outcomes.

**Data source:** *Local data collection.*

### ***What the quality statement means for service providers, healthcare professionals and commissioners***

**Service providers** (secondary care) ensure that referral pathways are in place so that pregnant women with pre-existing diabetes are seen at the joint diabetes and antenatal clinic within 1 week of the pregnancy being confirmed.

**Healthcare professionals** (members of joint diabetes and antenatal care teams) ensure that they see pregnant women with pre-existing diabetes within 1 week of their pregnancy being confirmed.

**Commissioners** (clinical commissioning groups) ensure that they commission joint diabetes and antenatal clinics that see pregnant women with pre-existing diabetes within 1 week of their pregnancy being confirmed.

### ***What the quality statement means for patients***

Pregnant women who had diabetes before they became pregnant have an appointment with a joint diabetes and antenatal clinic within 1 week of finding out that they are pregnant.

### ***Source guidance***

- [Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period](#) (2015) NICE guideline NG3, recommendation 1.3.34

### ***Definitions of terms used in this quality statement***

#### **Joint diabetes and antenatal clinic**

A clinic with a multidisciplinary team consisting of an obstetrician, a diabetes physician, a diabetes specialist nurse, a midwife and a dietitian. [[National service framework for diabetes](#)]

#### ***Question for consultation***

Are services for pregnant women with diabetes provided by a joint diabetes and antenatal clinic, if not how are services provided?

## Quality statement 4: Measuring HbA1c levels at booking appointment

### ***Quality statement***

Pregnant women with pre-existing diabetes have their HbA1c levels measured at their booking appointment.

### ***Rationale***

A woman's HbA1c levels can be used to determine the level of risk for her pregnancy. Women who had diabetes before they became pregnant should have their HbA1c levels measured during early pregnancy to identify the risk of potential adverse pregnancy outcomes and to ensure that any identified risks are managed.

### ***Quality measures***

#### **Structure**

a) Evidence of local arrangements and written clinical protocols to ensure that pregnant women with pre-existing diabetes have their HbA1c levels measured at their booking appointment.

**Data source:** [National Pregnancy in Diabetes Audit](#) and local data collection.

#### **Process**

Proportion of pregnant women with pre-existing diabetes who have their HbA1c levels measured at their booking appointment.

Numerator – the number in the denominator who have their HbA1c levels measured at their booking appointment.

Denominator – the number of pregnant women with pre-existing diabetes.

**Data source:** [National Pregnancy in Diabetes Audit](#) and local data collection.

#### **Outcome**

Mode of birth

**Data source:** [National Pregnancy in Diabetes Audit](#) and local data collection.

### ***What the quality statement means for service providers, healthcare professionals and commissioners***

**Service providers** (secondary care services) ensure that systems are in place so that pregnant women with pre-existing diabetes have their HbA1c levels measured at their booking appointment.

**Healthcare professionals** (in antenatal care and joint diabetes and antenatal care teams) ensure that they test the HbA1c levels of pregnant women with pre-existing diabetes at their booking appointment.

**Commissioners** (clinical commissioning groups) ensure that they commission services in which pregnant women with pre-existing diabetes have their HbA1c levels measured at their booking appointment.

### ***What the quality statement means for patients***

**Pregnant women who had diabetes before they became pregnant** have their HbA1c levels tested at their booking appointment (their first official antenatal appointment).

### ***Source guidance***

- [Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period](#) (2015) NICE guideline NG3, recommendation 1.3.7

### ***Definitions of terms used in this quality statement***

#### **Booking appointment**

A woman with diabetes will usually have a booking appointment with the joint diabetes and antenatal care team by 10 weeks of pregnancy. In some cases this appointment may take place earlier during the pregnancy. [[Diabetes in pregnancy](#) (NICE guideline NG3) and expert opinion]

## Quality statement 5: Retinal assessment at booking appointment

### ***Quality statement***

Pregnant women with pre-existing diabetes are referred for retinal assessment at their booking appointment.

### ***Rationale***

Pregnant women with diabetes can have an increased risk of progression of diabetic retinopathy. Pregnant women should therefore be screened more often for diabetic retinopathy. Retinal assessment should be offered at the booking appointment unless the woman has had an assessment in the last 3 months.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements and written clinical protocols to ensure that pregnant women with pre-existing diabetes are referred for retinal assessment at their booking appointment.

***Data source:*** Local data source.

#### **Process**

a) Proportion of pregnant women with pre-existing diabetes who are referred for retinal assessment at their booking appointment.

Numerator – the number in the denominator who are referred for retinal assessment at their booking appointment.

Denominator – the number of pregnant women with pre-existing diabetes.

***Data source:*** Local data collection.

b) Proportion of pregnant women with pre-existing diabetes who have a retinal assessment in the first trimester.

Numerator – the number in the denominator who have a retinal assessment in the first trimester.

Denominator – the number of pregnant women with pre-existing diabetes referred for a retinal assessment at their booking appointment.

**Data source:** [National Pregnancy in Diabetes Audit](#) and Local data collection.

### **Outcome**

a) Rates of diabetic retinopathy.

**Data source:** Local data collection.

b) Diabetic retinopathy progression.

**Data source:** Local data collection.

### ***What the quality statement means for service providers, healthcare professionals and commissioners***

**Service providers** (in primary and secondary services) ensure that pregnant women with pre-existing diabetes are referred for a retinal assessment at their booking appointment.

**Healthcare professionals** (joint diabetes and antenatal care teams) ensure that they refer pregnant women with pre-existing diabetes for a retinal assessment at their booking appointment.

**Commissioners** (clinical commissioning groups) ensure that they commission services in which pregnant women with pre-existing diabetes are referred for a retinal assessment at their booking appointment. Commissioners ensure that services communicate the results of retinal assessments to the joint diabetes and antenatal care team.

### ***What the quality statement means for patients***

**Pregnant women who had diabetes before they became pregnant** are referred for a screening check for eye damage (retinopathy) at their booking appointment.

### **Source guidance**

- [Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period](#) (2015) NICE guideline NG3, recommendation 1.3.24

### **Definitions of terms used in this quality statement**

#### **Retinal assessment**

A retinal assessment should be done by digital imaging with mydriasis (dilation of the pupils) using tropicamide, in accordance with the [National Screening Committee's diabetic retinopathy screening programme](#).

#### **Booking appointment**

A woman with diabetes will usually have a booking appointment with the joint diabetes and antenatal care team by 10 weeks of pregnancy. In some cases this appointment may take place earlier in the pregnancy. [[Diabetes in pregnancy](#) (NICE guideline NG3) and expert opinion]

## Quality statement 6: Review after a diagnosis of gestational diabetes

### ***Quality statement***

Women diagnosed with gestational diabetes are reviewed at the joint diabetes and antenatal clinic within 1 week of diagnosis.

### ***Rationale***

Pregnant women diagnosed with gestational diabetes should have specialist advice and treatment in a timely manner, and should be reviewed by members of the joint diabetes and antenatal care team within 1 week of being diagnosed. The joint clinic should provide the woman with advice, including why gestational diabetes occurs, potential risks and complications, and treatments aimed at reducing those risks.

### ***Quality measures***

#### **Structure**

a) Evidence of local arrangements to provide a joint diabetes and antenatal clinic.

**Data source:** Local data collection.

b) Evidence of local arrangements and written clinical protocols to ensure that women diagnosed with gestational diabetes are reviewed at the joint diabetes and antenatal clinic within 1 week of diagnosis.

**Data source:** Local data collection.

#### **Process**

Proportion of women diagnosed with gestational diabetes who that are reviewed at the joint diabetes and antenatal clinic within 1 week of diagnosis.

Numerator – the number in the denominator reviewed at the joint diabetes and antenatal clinic within 1 week of diagnosis.

Denominator – the number of women diagnosed with gestational diabetes.

**Data source:** Local data collection.

### **Outcome**

a) Maternal complications.

**Data source:** Local data collection.

b) Perinatal morbidity.

**Data source:** Local data collection.

c) Incidence of type 2 diabetes following gestational diabetes.

**Data source:** Local data collection.

### ***What the quality statement means for service providers, healthcare professionals and commissioners***

**Service providers** (in secondary and community care) ensure that women diagnosed with gestational diabetes are reviewed at the joint diabetes and antenatal clinic within 1 week of diagnosis.

**Healthcare professionals** (members of joint diabetes and antenatal care teams) ensure that they review women diagnosed with gestational diabetes within 1 week of diagnosis.

**Commissioners** (clinical commissioning groups) ensure that they commission services in which women diagnosed with gestational diabetes are reviewed at the joint diabetes and antenatal clinic within 1 week of diagnosis.

### ***What the quality statement means for patients***

**Pregnant women who are diagnosed with gestational diabetes** have an appointment with the joint diabetes and antenatal clinic within 1 week of their diagnosis.

**Source guidance**

- [Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period](#) (2015) NICE guideline NG3, recommendation 1.2.9

**Definitions of terms used in this quality statement****Joint diabetes and antenatal clinic**

A clinic with a multidisciplinary team consisting of an obstetrician, a diabetes physician, a diabetes specialist nurse, a midwife and a dietitian. [[National service framework for diabetes](#) ]

**Question for consultation**

Are services for pregnant women with diabetes provided by a joint diabetes and antenatal clinic, if not how are services provided?

## Quality statement 7: Annual HbA1c testing after gestational diabetes

### ***Quality statement***

Women who have had gestational diabetes have an annual HbA1c test.

### ***Rationale***

Women who have had gestational diabetes are at increased risk of getting it again in future pregnancies. They are also at higher risk of type 2 diabetes: if they are not diagnosed with type 2 diabetes in the immediate postnatal period (up to 13 weeks after the birth), they are still at high risk of developing it in the future. Early detection of type 2 diabetes by annual HbA1c testing in primary care can delay disease progression and reduce the risk of complications. Annual testing can also reduce the risk of uncontrolled or undetected diabetes in future pregnancies.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements and written clinical protocols to ensure that women who have had gestational diabetes have an annual HbA1c test.

**Data source:** Local data collection.

#### **Process**

Proportion of women who have had gestational diabetes in pregnancy have an annual HbA1c test.

Numerator – the number in the denominator who have an annual HbA1c test.

Denominator – the number of women who have had gestational diabetes

**Data source:** [GP Patient survey](#) and local data collection.

#### **Outcome**

a) Incidence of type 2 diabetes.

**Data source:** Local data collection.

b) Incidence of gestational diabetes.

**Data source:** Local data collection.

### ***What the quality statement means for service providers, healthcare professionals and commissioners***

**Service providers** (in primary care) ensure that systems are in place so that women who have had gestational diabetes have an annual HbA1c test.

**Healthcare professionals** ensure that they test HbA1c levels annually in women who have had gestational diabetes.

**Commissioners** (NHS England) ensure that they commission services that provide annual HbA1c testing for women who have had gestational diabetes.

### ***What the quality statement means for patients***

**Women who have had gestational diabetes** have the HbA1c levels in their blood measured once a year.

### ***Source guidance***

- [Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period](#) (2015) NICE guideline NG3, recommendation 1.6.14

## Status of this quality standard

This is the draft quality standard released for consultation from 7 August to 7 September 2015. It is not NICE's final quality standard on diabetes in pregnancy. The statements and measures presented in this document are provisional and may change after consultation with stakeholders.

Comments on the content of the draft standard must be submitted by 5pm on 7 September 2015. All eligible comments received during consultation will be reviewed by the Quality Standards Advisory Committee and the quality statements and measures will be refined in line with the Quality Standards Advisory Committee's considerations. The final quality standard will be available on the [NICE website](#) from January 2016.

## Using the quality standard

### *Quality measures*

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its [Indicators for Quality Improvement Programme](#). If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE's [What makes up a NICE quality standard?](#) for further information, including advice on using quality measures.

### *Levels of achievement*

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of

100% should be aspired to (or 0% if the quality statement states that something should not be done). However, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

### ***Using other national guidance and policy documents***

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered alongside the documents listed in Development sources [\[Link to section in web version\]](#)

## **Diversity, equality and language**

During the development of this quality standard, equality issues have been considered and [equality assessments](#) are available.

Good communication between health, public health and social care practitioners and pregnant women with diabetes is essential. Treatment, care and support, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. Pregnant women with diabetes should have access to an interpreter or advocate if needed.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

## **Development sources**

Further explanation of the methodology used can be found in the quality standards [Process guide](#).

## ***Evidence sources***

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Quality Standards Advisory Committee to develop the quality standard statements and measures.

- [Diabetes in pregnancy](#) (2015) NICE guidance NG3

## ***Policy context***

It is important that the quality standard is considered alongside current policy documents, including:

- Department of Health (2003) [National Service Framework for diabetes: delivery strategy](#)

## ***Definitions and data sources for the quality measures***

- Health & Social Care Information Centre (2014) [National pregnancy in diabetes audit report 2013](#)
- The Health and Social Care Information Centre [Maternity services data set](#)

## **Related NICE quality standards**

### ***Published***

- [Postnatal care](#) (2013) NICE quality standard 37
- [Antenatal care](#) (2012) NICE quality standard 22
- [Patient experience in adult NHS services](#) (2012) NICE quality standard 15
- [Diabetes in adults](#) (2011) NICE quality standard 6

### ***In development***

- [Antenatal and postnatal mental health](#). Publication expected October 2015
- [Intrapartum care](#). Publication expected December 2015
- Diabetes in children and young people. Publication expected June 2016

### ***Future quality standards***

This quality standard has been developed in the context of all quality standards referred to NICE, including the following topics scheduled for future development:

- Contraceptive services

The full list of quality standard topics referred to NICE is available from the [quality standards topic library](#) on the NICE website.

## **Quality Standards Advisory Committee and NICE project team**

### ***Quality Standards Advisory Committee***

This quality standard has been developed by Quality Standards Advisory Committee 1. Membership of this committee is as follows:

#### **Dr Gita Bhutani**

Professional Lead, Psychological Services, Lancashire Care NHS Foundation Trust

#### **Mrs Jennifer Bostock**

Lay member

#### **Dr Helen Bromley**

Consultant in Public Health, Cheshire West and Chester Council

#### **Dr Hasan Chowhan**

GP, NHS North East Essex Clinical Commissioning Group

#### **Ms Amanda de la Motte**

Service Manager/Lead Nurse Hospital Avoidance Team, Central Nottinghamshire Clinical Services

#### **Mr Phillip Dick**

Psychiatric Liaison Team Manager, West London Mental Health Trust

#### **Ms Phyllis Dunn**

Clinical Lead Nurse, University Hospital of North Staffordshire

**Dr Ian Manifold**

Head of Measures Development, National Peer Review Programme, NHS England

**Mr Gavin Maxwell**

Lay member

**Ms Teresa Middleton**

Deputy Director of Quality, NHS Gloucestershire Clinical Commissioning Group

**Mrs Juliette Millard**

UK Nursing and Health Professions Adviser, Leonard Cheshire Disability

**Hazel Trender**

Senior Vascular Nurse Specialist, Sheffield Teaching Hospital Trust

**Dr Hugo van Woerden**

Director of Public Health, NHS Highland

**Dr Bee Wee (Chair)**

Consultant and Senior Clinical Lecturer in Palliative Medicine, Oxford University Hospitals NHS Trust and Oxford University

**Ms Karen Whitehead**

Strategic Lead Health, Families and Partnerships, Bury Council

**Ms Alyson Whitmarsh**

Programme Head for Clinical Audit, Health and Social Care Information Centre

**Ms Jane Worsley**

Chief Operating Officer, Options Group, Alcester Heath, Warwickshire

**Dr Arnold Zermansky**

GP, Leeds

The following specialist members joined the committee to develop this quality standard:

**Dr Michael Maresh**

Consultant Obstetrician, Central Manchester University Hospitals

**Dr Eleanor Scott**

Senior Lecturer in Medicine, Consultant in Diabetes and Endocrinology, University of Leeds and Leeds Teaching Hospitals NHS Trust

**Mrs Susan Stockley**

Specialist Nurse, Surrey & Sussex NHS Healthcare Trust

**Ms Diane Todd**

Specialist Midwife for Diabetes, University Hospitals of Leicester NHS Trust

**Mrs Stacia Smales Hill**

Lay member

***NICE project team***

**Nick Baillie**

Associate Director

**Esther Clifford**

Programme Manager

**Stephanie Birtles**

Technical Adviser

**Alison Tariq**

Senior Technical Analyst

**Jenny Mills**

Project Manager/Co-ordinator

**About this quality standard**

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

The methods and processes for developing NICE quality standards are described in the [quality standards process guide](#).

This quality standard has been incorporated into the NICE pathway on [Diabetes in pregnancy](#).

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

### **Copyright**

© National Institute for Health and Care Excellence 2015. All rights reserved. NICE copyright material can be downloaded for private research and study, and may be reproduced for educational and not-for-profit purposes. No reproduction by or for commercial organisations, or for commercial purposes, is allowed without the written permission of NICE.

ISBN: